INTRODUCTION

3.1 This chapter of the ES describes the background to the Proposed Development and details the Site opportunities, constraints and considerations that have influenced the Proposed Development. It provides a summary of the evolution of the design leading to the current Proposed Development including, where relevant, consideration of environmental effects.

SITE ENVIRONMENTAL CONTEXT

Surrounding Area – Description and Environmental Context

- 3.2 The Site is broadly rectangular in shape and covers a total area of 3.28 hectares (ha). The Site comprises mostly cleared land, being previously used as a construction laydown site for the Canary Wharf Crossrail Station (located directly to the south of the Site in the North Dock). Since the structure of that was completed, the Site has been used for storage of construction materials for other projects and currently also provides temporary accommodation for Work Path (employment centre), advertising structures and the Tower Hamlets Employment and Training Services. It is likely that some utilities are present below ground level. The southern most area of the Site extends into part of the North Dock (Figure 3.1).
- A Grade I Listed brick dock wall (known as the Banana Wall) exists below the surface of part of the Site running 3.3 from west to east, which originally formed the dockside until it was extended over to the south. The dockside was extended with an existing false quay which is a reinforced concrete structure supported on marine piles within the North Dock. The false quay structure was constructed in the 1930's and is in poor condition and cannot be incorporated into the Proposed Development. Refer to ES Volume 1, Chapter 4: The Proposed Development for further information.
- 3.4 The area of land in the north-west corner of the Site is referred to as the Delta Junction. This portion of the Site is covered by DLR Lines overhead and is an area of predominantly hardstanding with an access road coming off of Hertsmere Road to the boundary of the Site.
- **3.5** To the north of the Site there is a bridge over Aspen Way (A1261) and the DLR tracks that connects the Site with South Poplar ('Aspen Way Footbridge'), as well as a pedestrian walkway adjacent to Aspen Way (which is temporarily partially redirected as a result of the existing Site). South Poplar has potential to have much improved connectivity through to Canary Wharf. Aspen Way, which forms a barrier to the area to the south, is a major connection to City of London to the west, as well as destinations in the east, including London City Airport. Aspen Way Footbridge is currently accessed via a staircase and lift towers.
- 3.6 Billingsgate wholesale fish market is located to the east of the Site. The Corporation of London relocated Billingsgate fish market to this location in 1982 from its earlier location in the City. Presently, the fish sold at the market arrives there by road and the market is open from Tuesday to Saturday. Trading commences at 4 a.m. and finishes at 8:30 a.m. In 2019, the Corporation of London acquired a site in Dagenham to relocate and consolidate Billingsgate along with two other London markets; New Spitalfields and Smithfield. This offers the opportunity for Billingsgate to come forward as a new development site in the near future and this is recognised through Site Allocation 4.2 in the LBTH Local Plan 2031.

- 3.7 Located in the North Dock, to the south of the Site, Canary Wharf Crossrail Station provides new public spaces garden, pavilions and station entrances.
- within a tall building zone (Canary Wharf Cluster).
- 3.9 west.

Figure 3.1 The Current Site (November 2019)



and links. There are a number of levels both above and level with the water, which include retail uses, a roof

3.8 The Site has a number of Planning Designations (see ES Volume 1, Chapter 2: EIA Methodology) and is allocated (4.9 – North Quay) within LBTH's Local Plan for Employment Preferred Office Location (Secondary) with ancillary supporting uses such as gyms, hotels, restaurants, retail and Housing. The Site also is located

In terms of the wider context of the Site, it is part of the Canary Wharf, the prevailing character of which is dominated by a cluster of very large/tall commercial buildings, built over the last 30 years. The area around the Site comprises residential use and the New City College to the north beyond the A1261 Aspen Way. Billingsgate Market (the United Kingdom's largest inland fish market) is located to the east, office and retail uses are situated to the south beyond the North Dock and the Canary Wharf Crossrail Station. Hotels, including the London Britannia International Hotel located to the south and the Canary Wharf Marriott Hotel (which has residential units in a number of floors above the hotel) and Canary Riverside Plaza Hotel are located to the

Local Environmental Context

3.10 Table 3.1 and Figure 3.2 below sets out the key environmental context of the Site and surrounding area.

 Table 3.1 Key Environmental Context, Features and Designations

Environmental Topic	Key Features and Designations
Air Quality	• The Site (and the whole borough) is located within the LBTH Air Quality Management Area, designated for the exceedance of Particulate Matter (PM10) for 24 hour mean and Nitrogen Dioxide (NO2) for annual mean.
	The closest air quality monitoring system is Blackwall which is located approximately 1.10km northeast of the Site.
Archaeology	• The Site lies within the Isle of Dogs Archaeological Priority Area (APA) (Tier 3 ¹).
	Grade I listed Late-Post Medieval/Modern West India Docks (Banana Wall) warehouse foundations are present below ground at the study site. It was built between 1803 and 1806 and involved skilful engineering to construct. The main brick build incorporated a curving or banana-shaped section, both for structural stability and to accommodate the profile of ships' hulls.
Daylight, Sunlight and Overshadowing	Daylight and Sunlight receptors in proximity of the Site include a number of residential receptors surrounding the Site and New City College which is located approximately 200m north of the Site.
	• Users of the A1261 Aspen Way located directly north of the Site and railway lines which border the Site to the west and further north of the Site are solar glare receptors.
	Areas of open amenity space have been considered as overshadowing receptors.
Ecology and Biodiversity	 The Site is not within a 'sensitive area' (as defined in Part 1 of the EIA Regulations) and does not fall within the boundaries of any statutory or non-statutory sites, including Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR) and Local Nature Reserves (LNR). The Site is located adjacent to a Site of Importance for Nature Conservation (West India Docks) (SINC).
	• Epping Forest is the nearest SAC located over 8km to the north east of the Site.
Geoenvironmental	The Site has a bedrock geology of Lambeth Group – clay, silt and sand and superficial deposits of Alluvium – clay, silt, sand and peat.
Noise and Vibration	 Noise receptors in proximity to the Site include the Canary Wharf Marriot Hotel (which includes residential units in the top levels of the building) to the west of the site, surrounding office uses to the south of the Site and residential receptors north, west and north-east of the site.
	• The suitability of the Site will also be assessed with considerations being made to surrounding noise causes such as West India Quay DLR station to the west of the site, Poplar DLR station located north of the site and the A1261 (Aspen Way) to the north.
Socio-Economics	• Our Lady and St Joseph Catholic Primary School is located approximately 350m to the northwest.
	The nearest GP Surgery (Bupa) is located approximately 200m to the south.
	 Nearby open spaces include Poplar Recreation Ground (approximately 350m to the northeast)) and Jubilee Park (approximately 400m to the south).
Traffic and Transport	• The Site currently has 'good' access to public transport with a PTAL of 5 in which all public transport modes in London currently available including National Rail, London Overground, Tube, DLR, Tram, Buses. The PTAL will rise to 6a providing 'excellent' access to public transport once Crossrail is in Operation.
	• Canary Wharf Crossrail Station is located at the southern boundary of the Site as shown in Figure 3.2.
	 Vehicular access to the Site is from Upper Bank Street east of the Site, a new access road from Hertsmere Road to the west has been implemented as part of the 2007 Consent, although no access is currently permitted via this link.
	The closest bus stops (F and H) are located on North Colonnade and Canada Square North respectively, accessible within 500m (< 6-minute walk) of the entire site.
	• West India Quay DLR station is located west of the Site and Poplar DLR station is located north of the Site (past Aspen Way). London City Airport is located approximately 4.45km east of the Site.
	• The Site is well connected to the local and national cycle network. Cycle routes are accessible from the Site within 610m from Westferry Circus. Similarly, Cycle Superhighway 3: Barking to Tower Gateway (CS3) operates in an east-west direction north of the Isle of Dogs, 200m from the Site from Poplar High Street and Aspen Way.
	• The Site can be accessed by a pedestrian footbridge (Aspen Way Footbridge) entering the Site from the north, which can be accessed via a staircase and lift tower in South Poplar.

Environmental Topic	Key F
Townscape and Heritage	 The Site is not located within a Cons The Site contains the Grade I Listed There are conservation areas in pro located approximately 450m west or north of the Site. In terms of the wider context of the S of very large/tall commercial building
Existing and Emerging Site Designations	 The following site-specific designations fr Local Plan Site Allocation: North Quay (4.9); Preferred Office Location: Canary W Tall Building Zone: Canary Wharf C Strategically Important Skyline: Can Tower Hamlets Activity Area: Isle of Statutory Listed Building: Quay Wal Flood Risk Area (Flood Zones 2 and Adjacent to Site of Importance for N Green Grid Buffer Zone; New Green Grid; Archaeological Priority Area: Isle of Conservation Area: West India Doci London Cycle Network: Tower Ham Area of Deficiency of Access to Nat London Plan Isle of Dogs and South Poplar Oppo Major Town Centre; Central Activities Zone (CAZ) for off Draft London Plan Isle of Dogs and South Poplar Oppo Metropolitan Centre: Canary Wharf;

[•] CAZ Satellite - Northern Isle of Dogs.



Key Features and Designations

Conservation Area.

isted Banana Wall.

n proximity to the Site including West India Dock Conservation area est of the Site and St. Mathias Church, Poplar approximately 350m

the Site, it is part of the Canary Wharf which is dominated by a cluster ildings, built over the last 30 years.

ons from the adopted London Plan and Local Plan affect the Site:

9); ary Wharf Secondary; arf Cluster; : Canary Wharf Area; sle of Dogs Activity Area; y Walls, Copings and Buttresses; 2 and 3); for Nature Conservation;

sle of Dogs; a Dock; Hamlets; o Nature: Millwall (Tower Hamlets);

Opportunity Area;

for offices;

Opportunity Area; /harf; and f Dogs.

¹ Tier 3 is a landscape scale zone within which the Greater London Historic Environment Record (GLHER) holds evidence indicating the potential

Figure 3.2 Existing Environmental Context





ALTERNATIVES ANALYSIS

- 3.11 Under the EIA Regulations, an ES is required to provide a "description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects". The following sections review those alternatives to the Proposed Development that have been considered by the Applicant, including:
 - The Do-Nothing / No Development Alternative;
 - Alternative Sites: and
 - Alternative Schemes.

Do-Nothing / No Development Alternative

- 3.12 The Do-Nothing / No Development Alternative refers to the option of leaving the Site in its current state. This option would be inappropriate for a number of reasons including:
 - The Site is already almost completely cleared with only a few temporary uses on-site and it would be a lost opportunity for development of an underutilised site;
 - The Site is located within an Opportunity Area in the London Plan, and has a Site Allocation in the LBTH's Local Plan, promoting employment, leisure, retail and housing as appropriate uses. The draft London Plan (2019) identifies the Isle of Dogs (North) as a CAZ 'satellite' and identifies a number of appropriate uses including offices, leisure, retail, and residential and community uses;
 - The Site is located within the Isle of Dogs and South Poplar Opportunity Area where development should be optimised;
 - The Do-Nothing alternative would represent a lost opportunity to provide not only office and commercial space but also residential units to support in the LBTH's housing aims, providing a mix of type and tenure (including affordable housing);
 - It would represent a lost opportunity to open up the Site for greater public accessibility (e.g. the connection to Poplar from Canary Wharf and to additional transport services) and significant improvements to the public realm: and
 - As discussed in paragraphs 3.14 and 3.15, the Site is subject to an implemented planning consent (the 2007 Consent which is not being brought forward) which demonstrates that development on the Site is appropriate.

Alternative Sites

- **3.13** No alternative sites have been considered by the Applicant for the following reasons:
 - The Site is owned by the Applicant, and therefore the Applicant did not consider alternative sites which are the property of a third party;

- Site has policy support;
- greater and more varied offices, housing, retail and leisure opportunities; and
- Applicant that the Site is appropriate for the Proposed Development.

Alternative Schemes

- **3.14** In order to be a 'reasonable alternative scheme' a scheme would need to:
 - the LBTH Local Plan.
 - Methodology.
 - Meet current market requirements.

The 2007 Consent

- **3.15** The 2007 consent was implemented in November 2016. The Certificate of Lawful Development issued by the Listed Building Consent (PA/03/00380).
- **3.16** Following the use of the Site as a construction laydown site for the Canary Wharf Crossrail Station, the granted in 2007.
- **3.17** The 2007 Consent does not comply with current planning policy or the current specific Site Allocation (4.9 alternative or alternative design within this ES.

The 2017 Withdrawn Scheme

3.18 The proposals set out within the 2017 North Quay planning application (LPA ref. PA/17/01193) were principally

• The Site is located within an Opportunity Area in the London Plan, and has an allocation in the LBTH's Local Plan, which seeks to maximise employment and residential development and so the development of the

 The Site would provide a key development opportunity to contribute to the regeneration of an underutilised site, within a wider context of future development growth including Crossrail, and to provide the potential for

The Site is subject to an implemented planning consent (the 2007 Consent) which demonstrates to the

• Comply with current planning policy and the current specific Site Allocation (4.9 - North Quay) set out within

 Adhere to the Applicant's design brief for the Site as listed below in this ES chapter and the development principles defined by the OPA's Control Documents detailed in ES Volume 1, Chapter 4: EIA

LBTH in January 2017 (LPA ref. PA/16/03765) confirmed that planning permission PA/03/00379 had been lawfully implemented. In March 2017 demolition works were undertaken to the false quay to implement the

Applicant determined not to take forward the 2007 Consent for construction on a speculative basis. For such a scale of development, the Applicant would require a pre-let for at least one of the buildings. The Applicant is also aware that certain trends within the office market have evolved since planning permission was originally

North Quay) set out within the LBTH Local Plan. The 2007 Consent does not adhere to the Applicant's design brief for the Site as listed below in this ES chapter, or the development principles defined by the OPA's Control Documents detailed in ES Volume 1, Chapter 4: EIA Methodology. In addition, this scheme does not meet the current market requirements. Therefore, the 2007 Consent has not been considered as a reasonable

informed by the requirements of the prospective anchor office tenant. The 2017 North Quay planning application proposed up to 339,243 m² (GIA) of accommodation. An office building (47 storeys) was proposed on the eastern side of the site and three residential buildings (between 30 and 67 storeys) were proposed on the western side. A podium space on the lower levels accommodated retail units and fronted onto a new public space facing North Dock.

- **3.19** Following a decision by the prospective anchor office tenant not to relocate to North Quay, both the full planning application and associated Listed Building Consent application were withdrawn in December 2017. As this scheme was withdrawn and was not consented by the LBTH, and given those reasons provided in paragraph 3.17 that remain applicable to this scheme, the 2017 Withdraw Scheme has not been considered as a reasonable alternative or alternative design within this ES.
- 3.20 No other possible alternative schemes were identified or studied by the Applicant.

DESIGN EVOLUTION

- **3.21** The following sections of this ES chapter describe the design evolution of the proposals, and is structured around the initial design brief and principles, the key design and site considerations, and changes which were as a result of pre-application consultation meetings and public consultation meetings and technical analysis that have led to the final design of the Proposed Development.
- **3.22** Further information on the design details of the Proposed Development is included within the Design and Access Statement (DAS) submitted alongside the OPA. Figure 3.3 provides an overview and summary of the design evolution of the Proposed Development, and the timeline over which this process occurred
- 3.23 The design brief for the Proposed Development sets the basis of the scheme and so whilst the design process looked at numerous different design iterations and options, there were no other alternative schemes explored. Therefore, the following sections of this ES chapter discusses the evolution of the scheme from the initial design brief, and includes the key environmental considerations which influenced the design.



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Figure 3.3 Time of Design Evolution of the Proposed Development







Design Brief

- **3.24** The brief given for the design of the Proposed Development was to provide a number of flexible buildings with a mix of uses, integrated with ground level amenities, retail and open space. The key aspects of the brief were to deliver:
 - A development that will strengthen pedestrian connections between the Site and surrounding area;
 - New office buildings with external terraces and other shared amenities with the flexibility to provide a range of floorplates to suit a variety of potential tenants;
 - New buildings which provide flexibility for residential, student, hotel and co-living uses;
 - A variety of active retail and community spaces to promote footfall east-west across the Site in addition to north-south permeability between South Poplar, Crossrail Place and Canary Wharf; and
 - Create public spaces with a sense of character and space with demand-led uses.

Design Considerations

- 3.25 The design of the Proposed Development has evolved in accordance with the specific constraints and opportunities that the Site offers.
- **3.26** At the start of the design process, a site analysis was carried out by the Applicant's design team to establish the key considerations and site-specific factors that would drive the development of the design.
- 3.27 Throughout the design process, which included pre-application engagement with the LBTH and other stakeholders (including the Greater London Authority (GLA), Transport for London (TfL), Historic England (HE), Canals and River Trust (CRT), Environmental Agency (EA) and Thames Water Utilities Limited (TWUL), as well as environmental testing and analysis, a range of issues were identified which have influenced the final layout, height, massing, appearance and use of the Proposed Development.
- **3.28** The design process has therefore sought to respond to these issues. This has produced various iterations of how the development objectives could be feasibly achieved on-site through the Proposed Development and the Indicative Scheme.

Kev Site Considerations

- **3.29** The key considerations during the design evolution of the Proposed Development included:
 - Improving Poor Pedestrian Connections There is currently a poor-quality pedestrian experience connecting the South Poplar community with the transport links and the major centre of Canary Wharf due to multiple level changes and an unorganised, indirect, route around the edge of the Site. Eastward pedestrian movement from West India Quay is restricted by the closed nature of North Quay and Billingsgate Market, which results in cycles and pedestrians having to use the edge of Aspen Way;
 - Existing Noise and Air Quality Issues Aspen Way, is a busy road and a source of traffic and air pollution for the Site. The elevated DLR rail lines at the north side of West India Quay station are also a noise source. The noise and air quality implications of the Proposed Development were taken into consideration throughout the design process;

- structural loading should be placed upon it;
- datum) on the west side, reducing to approximately 218m AOD adjacent to Upper Bank Street; and

Developing Key Principles of The Masterplan

- 3.30 Key principles evolved from an understanding of the context of the Site, the key opportunities and from previous designs. The key principles for the masterplan were:
 - and allows new public space on-site to be easily accessed by the community;
 - by inviting in and opening out to people and uses in adjacent places;
 - encourage animation of public spaces, streets and the water edge for the public;
 - to the future markets:
 - the district centre and onward to existing open spaces for play and recreation;
 - and recreation:

 Retained Listed Dock Wall (Banana Wall) - Part of the West India Import Dock wall runs west-east across the Site and is known as the Banana Wall. This wall is Grade I listed and should be preserved with no

 London City Airport Flight Protection Zone - The flight protection zone for London City Airport places limitation on the height of building structures on the Site to a maximum of 234m AOD (above ordnance

• Flood Risk - The Site's partial location within both Flood Zone 2 (medium risk) and Flood Zone 3 (high risk)

considerations, the principles were developed specifically for the Site and represent a culmination the Applicant brief, extensive analysis of the existing Site and surrounding context, as well as positive attributes retained

• Principle 1 - The masterplan's primary focus was creating a high guality public realm which improves connectivity of the Site and its surroundings. The network of routes, open spaces and waterside have been considered, in the previous schemes for the Site, such as large elevated podium structures which lifted the public above the waterside level. The Proposed Development instead brings the public realm to ground floor

· Principle 2 - Improvement to new and existing connections, the Site will create better connections with its neighbouring areas including South Poplar, West India Quay and, in the near future, the Billingsgate site -

 Principle 3 - Encourage a wider mix of land use classes on the Site and a complementary mix of uses within buildings (vertically) and across the Site (horizontally). Introducing active frontages to buildings and

Principle 4 – Creating flexible development zones based on simple geometric forms and floorplate dimensions which are capable of supporting a range of building types with different uses that can respond

Principle 5 – The dockside environment is an important part of the current character and historic identity of the Site. Allowing the history of the Site to inform the design by maximising the potential of the accessible active waterside. Improving connectivity with South Poplar is key to encouraging people into the Site and the occupiers of the Site out to the wider community. This would improve access through to public transport,

 Principle 6 - The opportunity exists to create a variety of urban environments within the Site, including an improved waterfront and garden spaces, a public square, a new stepped plaza, as well as areas for business

• Principle 7 - The provision of new live/stay buildings and modern workspace within the Masterplan would bring additional groups of people to this area. The Proposed Development should create a vibrant centre which will provide a public focal point for the Sites users to congregate, generating an identity for the area. Public consultation showed a desire to provide open space and co-working opportunities within the Site;

- Principle 8 Building heights and massing should be varied to provide an articulated skyline that not only responds to the taller, broad based office buildings of Canary Wharf but also to the lower residential dwellings to the north, with urban grain and proportions considered in relation to both the local and wider context:
- Principle 9 Biodiversity measures and sustainable strategies. The Masterplan should embrace a best practice approach to green infrastructure, energy use, walking, cycling, public transport, recreation and culture: and
- Principle 10 Enable a viable phasing strategy which is adaptable and amenable to future change, and where each phase can successfully stand on its own.

Consultation

3.31 Consultation and engagement with local stakeholders and the wider community was undertaken over an eightmonth period during the design evolution of the Proposed Development. Activities undertaken as part of the consultation process included meetings with local councillors, meetings with local stakeholder groups who have an interest in the Site, community presentations, public exhibitions, online information and newsletters about the development proposals. Further information, including dates in which the consultation activities were undertaken are provided within the DAS submitted alongside this OPA.

Public Consultation

- **3.32** Public consultation meetings were held in November 2019 and March 2020 to capture feedback on the initial design approach and the more advanced proposals respectively and to inform key stages of design development. The consultation process included information on site layout and placemaking, land use, massing, access and movement, public space, sustainability, and logistics and construction.
- 3.33 Collectively, over 250 people took part in the process, with 120 individual pieces of feedback collected in the form of written feedback and online surveys.
- **3.34** The majority of feedback regarding the principle of development and the proposed site approach was positive, including the benefits to movement, access and public realm. The primary topics raised through public consultation and stakeholder meetings were:
 - Movement and Connections The majority of people appreciated the benefit of improving the north-south pedestrianised connections through the Site to Poplar. It was also generally noted that the existing Poplar Link Bridge and the surrounding pedestrian and cycle infrastructure needed to be improved in terms of accessibility and safety;
 - Public Spaces The need for attractive, safe and inclusive public spaces was raised more than any other issue. Attendees welcomed the quality and scale of the proposals. Many stakeholders commented on the need for improved public realm around the edges of the Site as well as access to new public spaces;
 - Employment and Training The creation of employment opportunities for local people was considered a key priority for the area. Access to training courses relevant to local people was raised by the public and

several stakeholders, with the suggestion for potential links with New City College located approximately 200m north of the Site and is accessible from the Site by Aspen Way Footbridge:

- stakeholders raised a desire to see more affordable housing;
- for children and families being high up on the agenda;
- Proposed Development; and
- neighbours regarding views and overlooking.
- Reserved Matters Applications.

LBTH Consultation

- **3.36** A series of pre-application meetings were held with the LBTH planning and design officers from October 2019 could be included within the Parameter Plans and other Control Documents.
- consistently raised during consultation.

Initial Design Proposals and Design Evolution July-September 2019

- **3.38** A new approach for the development and masterplan of the Site was explored, learning from the two previous applications for the Site, and comprised:
 - Poplar, emerging adjacent development sites and the key constraints and opportunities;

Housing – Though the views on the need for more housing in the area were mixed, a number of community

 Retail and Leisure – The majority of respondents welcomed additional retail at the Site. It was noted that a more varied offer of leisure activities would be of benefit to the area, with activities or spaces specifically

• Community Spaces and Events – There were a number of suggestions at the public consultations for facilities that would serve the community, such as affordable spaces to hire and cultural spaces. It was also suggested that the hosting of live events would improve social links and provide a reason to visit the

• Height – Generally, stakeholders were pleased to see that proposed heights were an improvement on previous schemes proposed for the Site. However, there were some concerns raised by immediate

3.35 Where possible, the issues raised through consultation with stakeholders and the community have been incorporated into the design of the Proposed Development. Participants in the process understood that the outline nature of the application means that more details of the development would come forward through

through to February 2020. Pre-application meetings were held with the LBTH to present the Site and context analysis and emerging thoughts on the framework and massing for the Proposed Development. There was broad support from the LBTH for the new approach to the Site. Further information was requested at the first Pre-Application about the landscape and open space strategy alongside discussion on how the flexibility sought

3.37 Comments about the configuration of the main open spaces and the scale of the quayside in the masterplan and the relationship to the route connecting Poplar High Street (north of the Site) with Canary Wharf were

A site-wide context analysis which looked at the Local Plan site allocation, surrounding context, links to

 Bringing the public realm down to ground level and creating street level connections between the Proposed Development and surrounding areas. The previous schemes proposed elevated pedestrian footbridges across the Site, whereas the Proposed Development will create pedestrian connections at street level to incorporate the Site with its surroundings; and

- Incorporating maximum flexibility to enable the Proposed Development to react to unpredictable future markets by bringing in 'swing buildings' which allow for a range of land uses, whereas the previous schemes had set land use classes for mainly office and commercial use (creating employment opportunities).
- **3.39** A number of walking routes were investigated from the various nearby transport links and from Poplar High Street (to the north of the Site) through to the Site to understand key arrival positions and the journey experience for pedestrians (Figure 3.4). This analysis included modelled pedestrian anticipated movements from the Applicant's Transport Consultant to make sure movement and connections through the Site were adequately assessed. Pedestrian analysis continued to feed into the design which ensured that the key consultation comment on 'movement and connections' was considered and the potential benefits achieved.
- **3.40** From these arrival points, a series of initial site diagrams were developed to create a framework of routes and connections for the Site which concluded in the location of the network of streets and key public realm spaces for the masterplan (shown in oange in Figure 3.5). The Applicant's Transport Consultant provided analysis of the most appropriate and feasible access routes into the Site, predominantly from Hertsmere Road to the west and off of Upper Bank Street to the east which has access restrictions to the Site as vehicles are not able to come straight off of Aspen Way and turn right into the Site. This fed into the suitability and location of routes and network of streets.
- **3.41** From this analysis, and giving consideration to consultee key comments on public spaces and community spaces and events, the locations of the building development plots and the location of open spaces within the Site were considered and mapped out (Figure 3.6). This allowed the development of an initial Indicative Scheme Masterplan (Figure 3.7).



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Figure 3.4 Key Arrival Points to the Site



Figure 3.5 Network of Streets and Key Public Realm Spaces



Figure 3.6 Early Design Building Locations







Indicative Scheme & Design Refinement - October-November 2019

- **3.42** Further plans and 3D massing studies were developed and tested for an emerging Indicative Scheme, based on the developing masterplan and associated parameter plans, as can be seen in Figure 3.8 and 3.9. A variety of massing scenarios were studied with alternative mixes of live/stay buildings and workspace buildings to consider how this impacted on the urban relationships between buildings and on the massing composition as a whole (Figures 3.7, 3.8, 3.9, 3.11).
- **3.43** Early massing sketches looked at creating an articulated skyline (Figures 3.8 and 3.9) to the Site with some early placement in a couple of local townscape views to assess potential impact. This ensured that townscape and visual considerations were appropriately assessed and taken into account during the earliest stages of design evolution.
- 3.44 To help inform the initial landscape strategy for the masterplan, eye level perspective views showing the relative scales of routes and open spaces were developed and evaluated using a 3D design model. Early versions of the key Parameter Plans were also drafted and discussed through consultations. These were illustrated alongside 3D mould views of the Indicative Schemes within the maximum parameter built envelope.
- **3.45** A design workshop was held in November 2019 which focused on the emerging public realm as well as playspace requirements if residential dwellings came forward as part of the Proposed Development. In particular, the existing air quality and noise pollution levels across the Site were considered. Appropriate locations for play areas were highlighted (this included input from initial noise modelling of the Site and a detailed understanding of existing monitored air quality levels) and became the focus of playspace locations for the Proposed Development, along with planning policy guidance on the distance of playspace areas from the associated residential uses. This analysis was undertaken to reduce any adverse effects from the provision and location of amenity and playspace in relation to socio-economics and health, air quality and noise effects.
- 3.46 Additional analysis was undertaken on the area under the DLR lines to the north west of the Site known as the Delta Junction, with recommendations that this area should be targeted to older children where possible and mitigation measures suggested to reduce air quality and noise pollution including noise screening barriers, green walls and specific publicly accessible areas provided behind these structures (reducing adverse air quality and noise effects (with a potential reduction of approx. 5 dB - see ES Volume 1, Chapter 8: Noise and Vibration for further details) during design evolution). The concept of a skate park forming part of this area with planted or screened wall along the edge of Aspen Way to the north of the Delta are evolved from this workshop.
- 3.47 The initial air quality analysis also highlighted that residential units would most likely require mitigation if located at ground level and should ideally be located at level 1 and above. This was also the recommendation following initial flood risk analysis and review of the flood levels on-site. This was taken on board during the development of parameter plans and no residential dwellings are proposed at ground floor level, reducing adverse air quality effects to proposed residential uses through design evolution). Buildings which have the potential to come forward with residential uses will have retail or residential amenity uses on the ground floor with residential units located above.
- **3.48** During November 2019, initial pre-application meetings were held with the GLA, TfL and Historic England. Comments and feedback were broadly consistent from these key consultees. Points were raised about the configuration / arrangements of the main open spaces, the scale of the guayside in the masterplan and the

strength and relationship to the route connecting Poplar High Street with Canary Wharf (north to south). Further feedback said that it would be important that the Parameter Plans and Design Guidelines gave clear legible rules for the relationships between buildings if the level of flexibility were to be carried through the outline planning application.

Alternative Scheme (For the Indicative Scheme)

to Aspen Way, which was specifically requested by the LBTH during pre-application consultation.

Figure 3.8 Early Indicative Scheme Massing



Figure 3.9 Indicative Scheme Alternative



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3.49 An alternative for the design of the Indicative Scheme was developed, shown in Figure 3.9. This option was to give an option for the taller elements of the Proposed Development to be located to the north of the Site adjacent

(original naming convention)

Figure 3.10 Indicative Landscaping November 2019



Evolution of Development Zones

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- 3.50 In response to requests from the initial Pre-Application meetings with the LBTH further consideration was given to the design of the Parameter Plans, which were created around Indicative Scheme. The Development Zones have evolved from October 2019 to February 2020.
- 3.51 In October 2019 the Site was spilt into five Development Zones (A-E), developed from analysis of arrival points and street networks as detailed above, with space in the centre of the Site not included within a zone and therefore not used for development and instead for public realm.
- 3.52 In December 2019 the Site was split further into eight Development Zones, this is to include more of the Site to allow for works to be made to improve public realm and connectivity within the Site (taking on board public consultation comments about the need for improved public realm around the edges of the Site as well as access to new public spaces);
- 3.53 In January 2020 the Development Zones were split into Plots. This change was introduced to restrict the scale and massing of the Proposed Development further to ensure the Proposed Development does not cause any environmental implications in regards to townscape.
- 3.54 In the second pre-application meeting, the further developed plans and 3D massing images for the emerging Indicative Scheme and alternative massing scenarios were presented to the LBTH. A selection of eye level perspective views was also presented showing the relative scales of routes and open spaces within the Site along with initial landscape strategy for the masterplan.

Figure 3.11 Development Zones Evolution





February 2020

Revised Indicative Scheme - December 2019

- 3.55 Following feedback from the pre-application consultations in November 2019, further design work was undertaken to study the pedestrian route from Poplar High Street to Canary Wharf and the Indicative Scheme was reworked to adjust a number of building plots (shown above in Figure 3.7), widen the emerging arrival space from the bridge, Poplar Plaza, and to expand and study the quayside area.
- 3.56 A revised servicing strategy was presented which replaced ground level loading bays with below-ground loading bays, reducing the amount of back of house space at ground level, addressing the consultation comment.
- 3.57 A façade workshop was undertaken following initial noise modelling of the Site and emerging Indicative Scheme which provided details on the likely noise reduction levels required by proposed façade materials and in particular in relation to windows and balconies (this analysis was taken on board during design evolution to ensure suitable mitigation could be provided and thereby reducing adverse noise effects from this scheme evolution).
- **3.58** To develop and refine the various open spaces emerging within the masterplan, comparative scale studies were undertaken and precedent images were used. Changes to the landscape proposals in response to changes to the massing of the Indicative Scheme and the land uses involved the following and are shown in Figure 3.12:
 - A large central public square was created to the north of Crossrail between NQ.04 and NQ.07 improving the connection between Poplar and Crossrail (Figure 3.14 and 3.15);
 - The linear space between NQ.07 and NQ.08 was widened, a series of outdoor rooms with opportunities for play and exercise were created in response to the proposed uses change of NQ.08;
 - Poplar Plaza design was refined to provide a generous arrival plaza and directional route to Crossrail; and
 - Quayside was been widened in response to the LBTH comments.
- **3.59** Further feedback from a LBTH pre-application meeting in early December led to the further work on widening the width of the space on-site closest to Aspen Way Footbridge and the Site's relationship with the bridge. A series of eye level views were produced demonstrating the legibility of the route, including one view from Poplar High Street showing the impact if the New City College Poplar Campus extension were to be taken down, with a long ramped route built to the Aspen Way Footbridge (Figure 3.13).
- **3.60** Further development of the Parameter Plans during this period demonstrated ways in which uses, open space, routes/connections, extents of basements and building heights could be controlled whilst allowing appropriate flexibility for the future in line with the Design Principles and Control Documents.
- 3.61 The Applicant's Daylight and Sunlight Consultant ran analysis on a number of iterations of maximum height parameters and Indicative schemes to provide input on potential effects to sensitive surrounding receptors as well as internal daylight and sunlight levels. This analysis fed into the most suitable locations of building massing, public realm and open spaces (trying to incorporate consultation comments on the provision of attractive, safe and inclusive public spaces). The urban square (North Quay Square) in the middle and south of the Site was of particular focus with NQ.04 (shown in Figures 3.6 and 3.7) being reduced in height to improve sunlight levels to this area. In addition, cruciform building structures were assessed as part of the evolving

dwellings, as further detailed in ES Volume 1, Chapter 4: Proposed Development.

Figure 3.12 Landscaping Evolving Proposal December 2019







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Indicative Scheme for NQ.01 (Figure 3.8 and 3.9) to improve internal daylight and sunlight levels for residential

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- 3.62 At this stage the Applicant's Townscape Consultant provided input into the evolving Design Guidelines and Parameter Plans to ensure relevant codes were included to control the maximum building heights and articulation throughout the development plots. This input included codes on establishing minimum differences in height between live / stay buildings, minimum horizontal separation between all buildings, a code committing to high quality architecture and setting general locations and minimum widths of key routes throughout the Site. The above codes or 'controls' form part of the Control Documents submitted as part of this OPA and looked to address consultation points raised on heights, views and overlooking.
- **3.63** During December 2019, two further pre-application meetings were held with the LBTH and a presentation was made to the LBTH Executive Mayor. Presentation and discussions included the strength of the pedestrian route from Poplar High Street to Canary Wharf and revisions made to the Indicative Scheme following previous feedback. Comparative scale and precedents were given to understand the various open spaces emerging within the Masterplan. Further feedback led to further adjustments to Poplar Plaza and its relationship to the Aspen Way Footbridge. A series of eye level views demonstrated the legibility of the route from Poplar High Street and key spaces in the masterplan. Further discussion was held on the emerging Parameter Plans. The evolution of the Indicative Scheme between November and December is shown in Figures 3.14 and 3.15.



Figure 3.14 November 2019 Indicative Scheme Massing and Use Classes, Pre-application 3 Scheme



Further Design Development and the Masterplan - January 2020

- 3.64 During January 2020, work focused on the Indicative Scheme landscape and public realm design and to Crossrail Place and along Aspen Way.
- the west of NQ.01 and NQ.02.
- became cruciform in design to improve internal daylight and sunlight levels.

Figure 3.15 December 2019 Indicative Scheme Massing and Use Classes, Pre-application 4 Scheme

environment. Detailed studies were undertaken on each of the open spaces and routes in and through the Masterplan and this led to the production of two 3D movies showing a walk through the Site from Poplar Bridge

3.65 Further work was also undertaken to review the Indicative Scheme in the context of local townscape views. Feedback from technical consultants led to refinements of building layouts in the Indicative Scheme and adjustments to the maximum parameter envelope. This feedback included analysis from the Applicant's Wind Microclimate Consultants informed by Computational Fluid Dynamics simulations of a number of iterations of the Indicative Scheme to inform and aid technical feedback into the design. This lead to the inclusion of; canopies above certain entrances predominately facing south such as the southern facade of NQ.01, NQ.02 and NQ.04; 1.5m baffles to the southern facade of NQ.07; and additional landscaping including trees to mitigate down washing and corner wind acceleration particularly to the west of the Proposed Development including to

3.66 Following on-going consultation with the LBTH through pre-application meetings and ongoing analysis from the technical team including the Applicant's Townscape, Daylight and Sunlight, and Wind Microclimate consultants, the height of the Development Plot NQ.A1 at the north west of the Site was reduced by 75m to a maximum of 150m AOD, reducing the scale of adverse effects in relation to Development Plots and these environmental aspects. In addition, following Daylight and Sunlight analysis NQ.A1 of the Indicative Scheme

- 3.67 Some detailed refinements were made to the Indicative landscape masterplan following a review of the 3D walk through videos, including areas such as the landscaping zones along Aspen Way Gardens and the design of The Delta Junction, located under the elevated DLR tracks (Figure 3.18). A study was also undertaken on potential enhancements that could be made to the existing Aspen Way Footbridge.
- **3.68** Some key landscaping evolution has included changes to the Delta Junction and Aspen Way as follows:
 - Delta Junction:
 - In response to preliminary noise and air quality assessments, an acoustic barrier was incorporated into the Delta Junction Design to reduce the impacts of noise on the Site to create a more public friendly space that can be used by the community, this is a set Design Guideline; and
 - Aspen Way:
 - Further studies of pedestrian and cycle access along Aspen Way have been undertaken to make the Site more accessible for the public:
 - Design options for works to improve Aspen Way Footbridge have evolved by taking examples from similar sized bridges across London such as Golden Jubilee Bridge, Westminster Bridge and Millennium Bridge. The main design principle of which connected two major destinations with steps and step free access. This is something that has been brought into consideration whilst enhancing Aspen Way Footbridge and is secured in the Design Guidelines.
- 3.69 In addition, a marine ecological survey was undertaken following consultation with the LBTH Biodiversity Officer and following this survey additional aquatic habitat features relating to the North Dock were recommended and have been included within the Preliminary Ecological Appraisal submitted alongside this planning application.
- 3.70 As well as a further Pre-Application consultation, presentations were also made to the LBTH Strategic Development Committee and their Conservation and Design Advisory Panel. Main outcomes from these meetings were moving Residential Family Units to higher levels of the Proposed Development in response to air quality issues on the lower levels.
- **3.71** The Development Zones were further evolved in January 2020. These changes include:
 - Changes to the Development Zone and Plot Names from A to NQ.A and so on;
 - Development Zone NQ.E extended at its narrow points into NQ.D and NQ.A to create a longer central street within the centre of the Site: and
 - The creation of Plots within Development Zones. NQ.A was split into five Plots (NQ.A1-NQ.A5) which include height restrictions to add height variance within the Development Zone. NQ.D has been split into four Plots (NQ.D1-NQ.D4). NQ.H has been split into three Plots (NQ.H1-NQ.H3). NQ.F has been split into three Plots. NQ.B, NQ.C, NQ.E and NQ.G have stayed as one whole zone.
- **3.72** These changes were made to ensure that the Proposed Development has variant in height and massing to reduce the potential for and scale of adverse environmental effects relating to townscape, visual impacts and heritage.

Figure 3.16 January Evolving Masterplan Landscaping and Public Realm



3.73 During January 2020, a further pre-application meeting was held with the LBTH design and transport officers. January 2020.

Development of the Parameters, Design Guidelines and Development Specification - February 2020

- **3.74** After a design freeze on the Indicative Scheme, work progressed on final refinements to the Parameter Plans alongside development of the Design Guidelines and Development Specification areas.
- 3.75 In discussion with the Applicant's technical team a number of additional key environmental and socio-economic design codes were incorporated into the Control Documents including:
 - The amount and location of playspace for each age group to be specified to ensure space is provided for children of all ages in the correct locations;
 - A commitment that playspace will be accessible by all residents to ensure no segregation according to tenure and location;
 - A commitment to the Proposed Development being car-free with the exception of disabled persons parking;
 - Internal noise levels within any residential units to comply with BS 8233:2014 recommendations;
 - No right turn access to the Proposed Development for vehicles from Upper Bank Street;
 - No residential dwellings at lower floor levels fronting onto Aspen Way (in relation to air quality levels);

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Discussions focused on the Indicative Scheme landscape and public realm design and environment. A number of local townscape views were reviewed of the Indicative massing shown in context. Presentations were also made to LBTH Strategic Development Committee and their Conservation and Design Advisory Panel in

- Ensure any combustion plant flues terminate above roof level (excluding podium roofs) to make sure emissions are expelled as far from sensitive uses such as residential dwellings as possible;
- Provision of a minimum difference in height between buildings, maximum floorplates in Development Plots, establishment of maximum length of frontages or the break up of frontages through form and articulation and a commitment to buildings being of high quality architecture in response to Townscape and Visual comments and input;
- The incorporation of biodiverse roofs (substrate based and plug planted with wildflowers and added invertebrate habitat range in depth between 100-180mm), vertical greening, rain gardens, bird/bat boxes; and
- As far as possible, development levels will be raised above flood levels. All residential dwellings to be located at and above the first floor level above the extreme tidal flood level.
- **3.76** The final arrangement and details of the maximum parameter built envelope, Indicative Scheme and the indicative landscaping strategy is shown below in Figure 3.17 Figure 3.18 and 3.19 and is described in more detail in **ES Volume 1, Chapter 4: Proposed Development.**

Figure 3.17 Maximum Parameter Built Envelope ('Jelly Mould')



Figure 3.18 Final Indicative Scheme



Figure 3.19 Final Indicative Landscaping Strategy



